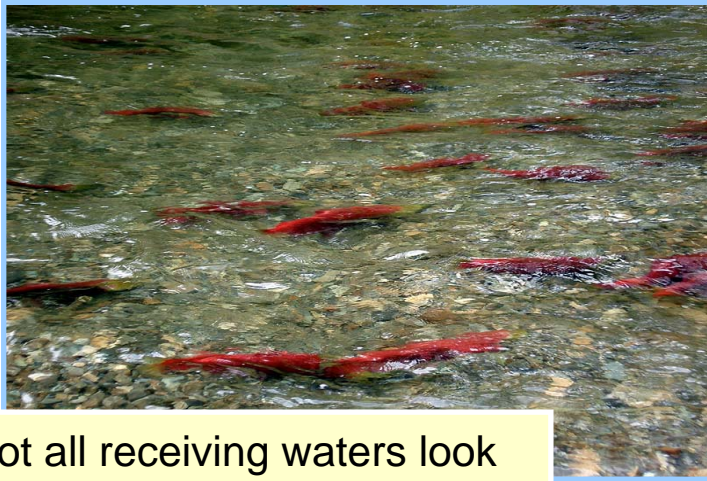


# Receiving water condition is important



Not all receiving waters look like this...



Some look like this...



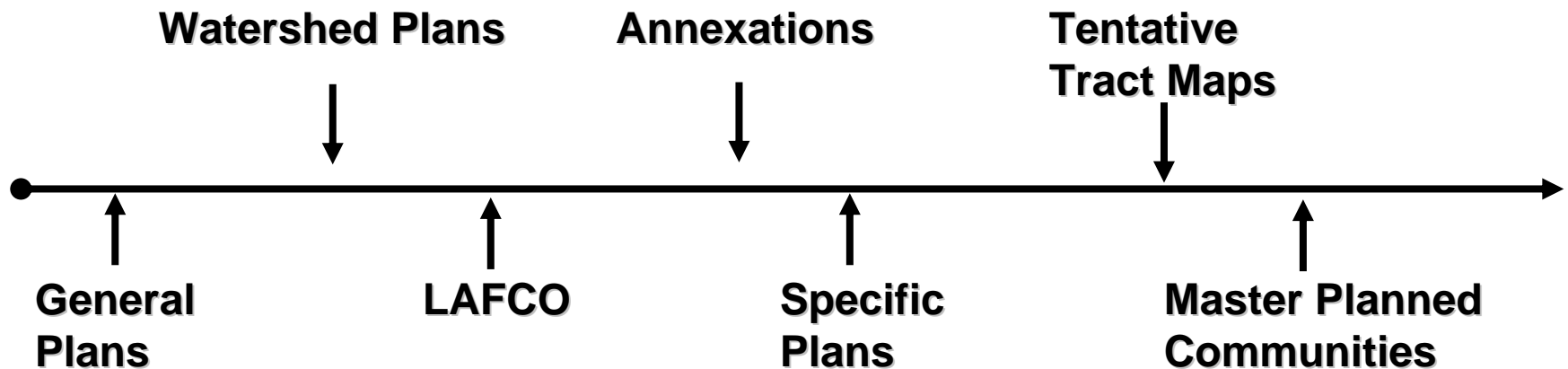
Or this...with naturally high turbidity

# Fixed, numeric metrics for site design features in MS4 Permits.....industry concerns:

- One-size fits all LID mandates
- Discounts feasibility determinations; eg. soil conditions, geotechnical constraints, sub-regional alternatives
- Establishes absolutes that don't reflect the reality of changes due to land use
- Use instead, the MS4 permit to establish levels of significance for CEQA process



# LID Water Quality Metrics into MS4 Permits—Synchronizing and integrating with CEQA



**Opportunities to Include LID Site Design Metrics into Projects**



# Why use the CEQA Process?

- **Apply LID metrics as early as possible in the land use planning and development design process**
- **LID metrics should not unduly complicate environmental review and project approvals—consider early and often**
- **LID metrics should not undermine vested project design approvals already settled pursuant to CEQA**





# Office Building/Business Park Project

*Project Area  $\approx$  10 acres*

*TIA  $\approx$  90%*

*EIA  $\approx$  4.5%*

Disconnected impervious areas  
= areas treated in bioretention

Effective areas = areas treated  
in media filters and  
downstream hydrodynamic  
separator

Media filters required due to  
space/grade restrictions



# Off-street Commercial Project

*Project Area  $\approx$  15 acres*

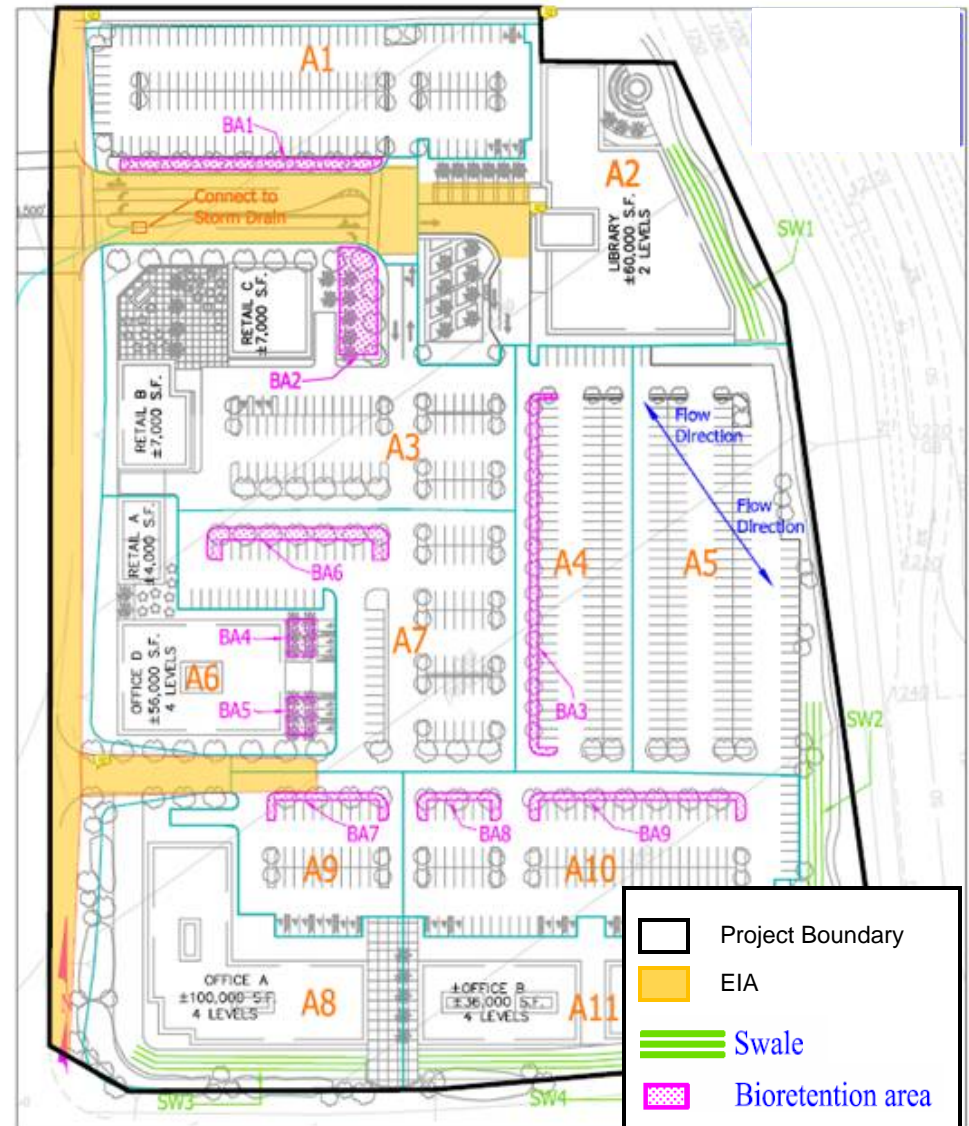
*TIA  $\approx$  90%*

*EIA  $\approx$  8%*

Disconnected impervious areas  
= areas treated in bioretention  
and swales

Effective areas = areas treated  
in media filters

Media filters required due to  
space/grade restrictions





# High Density Mixed Use Project

*Project Area  $\approx$  50 acres*

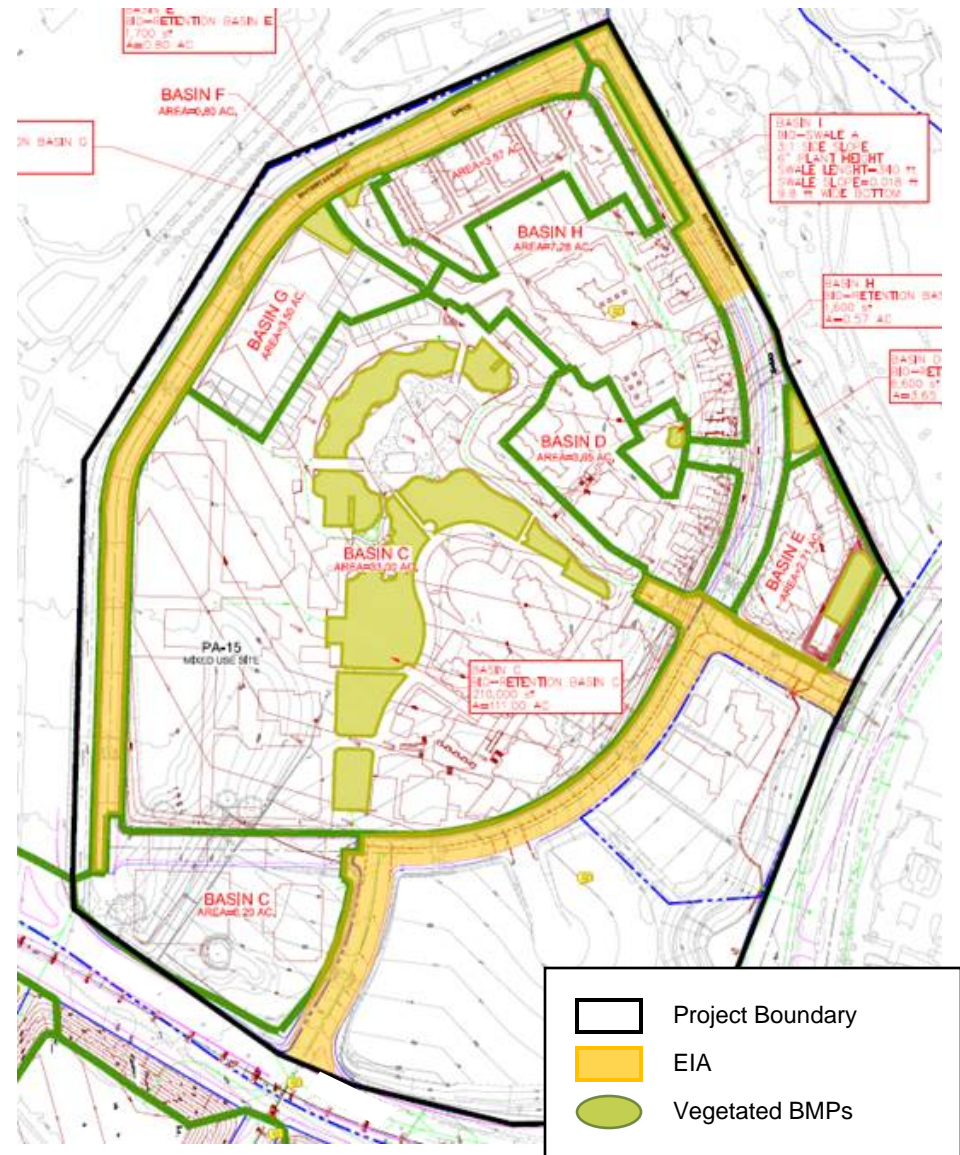
*TIA  $\approx$  80%*

*EIA  $\approx$  11%*

Disconnected impervious areas  
= areas treated in bioretention  
and retention lake

Effective areas = areas treated  
in media filters and  
downstream hydrodynamic  
separator

Media filters required due to  
space/grade restrictions



# Roadway Improvement Project

*Project Area  $\approx$  25 acres*

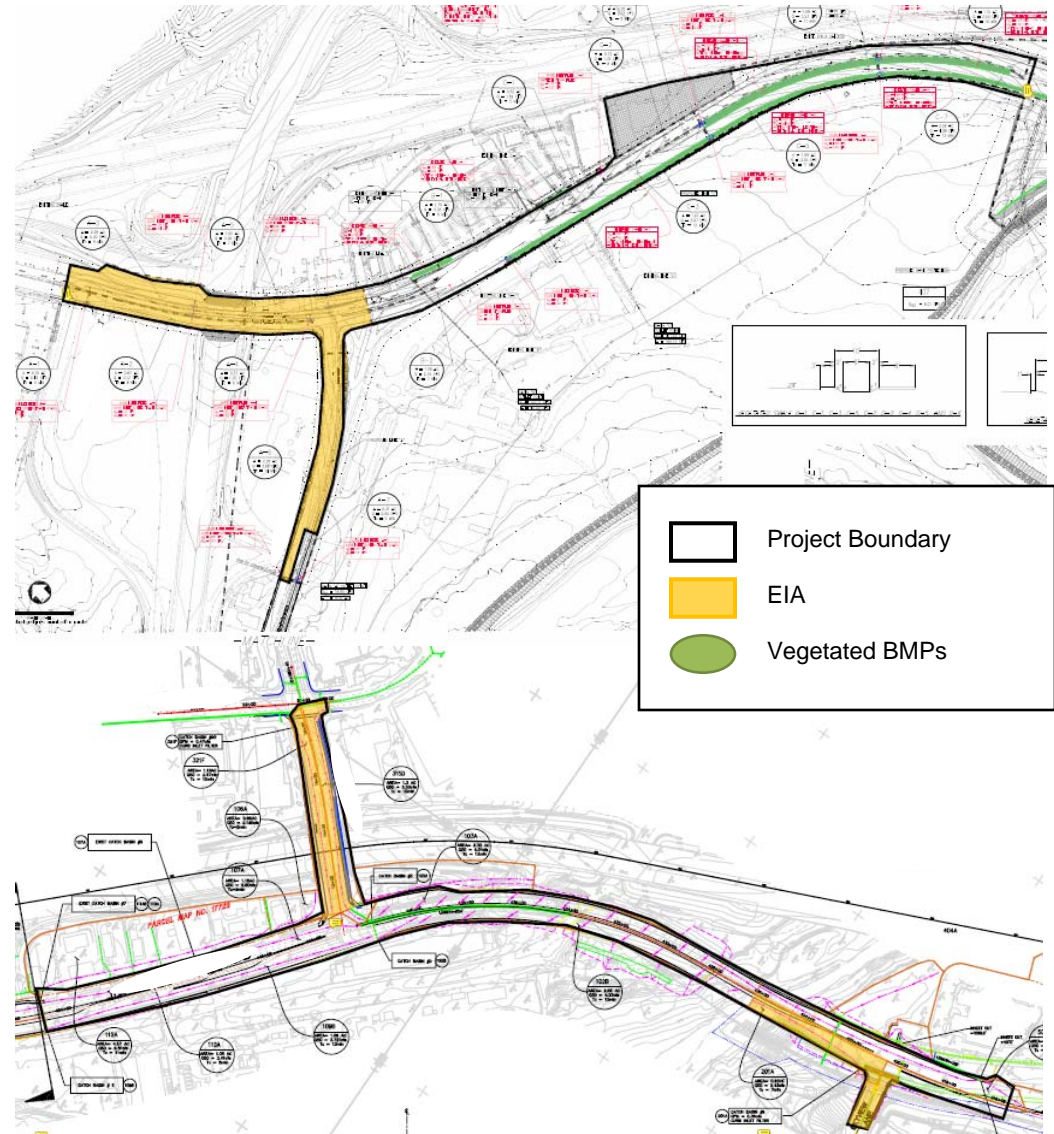
*TIA  $\approx$  90%*

*EIA  $\approx$  15%*

Disconnected impervious areas = areas treated in vegetated swales and EDBs

Effective areas = areas treated in media filters

Media filters required due to space/grade restrictions





# Summary

Land Use	Area, ac	Total Impervious Area, ac	%TIA	Effective Impervious Area, ac	%EIA
Office Building/Business Park	10	9.0	90%	0.45	<b>4.5%</b>
Off-street Commercial	15	13.5	90%	1.2	<b>8%</b>
High Density Mixed Use	50	40	80%	5.5	<b>11%</b>
Roadway Improvement	25	22.5	90%	3.8	<b>15%</b>